



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

H.A

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,518	01/06/2004	Brian S. Hilton	117058	3343
25944	7590	08/18/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			VO, ANH T N	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/751,518

**Applicant(s)**

HILTON ET AL.

**Examiner**

Anh T.N. Vo

**Art Unit**

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***FINAL REJECTION***

The objection of claims 1 and 7 and the rejection of claim 7 under 35 USC 112, second paragraph, are withdrawn in view of the amendments to the claims.

***Claims Rejections***

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-7, 9-12, 15-16 and 18-19 are rejected under 35 USC 102 (b) as being anticipated by Kobayashi et al (US 6,390,611).

With regard to claim 1, Kobayashi et al. discloses, in Figures 2,4A-4B and 7, a refillable fluid reservoir (6) comprising:

- a fluid reservoir (4, Figure 2) having top (an unmarked top that contains an element 24), bottom (an unmarked bottom is opposite with an unmarked top that contains an element 24) and side walls (an unmarked side wall that contains number 4 and an opposite wall) defining an interior volume (25) for housing fluid (Figure 2);
- a venting port (23) provided on one of the reservoir walls (top) and having an open end (lowest end of element 23) (Figure 4A); and
- a fluid inlet port (21) provided on one of the reservoir walls (top) and having an open end (lowest end of element 21), the open end of the venting port (23) and the open end of fluid inlet port (21) being located at substantially the same level, in gravitational direction (a direction from top wall to bottom wall of element 4) (see Figures 2 and 4A).

With regard to claim 2, Kobayashi's venting port (23) and the fluid inlet port (21) are located in the top wall of the fluid reservoir (4, Fig. 2).

With regard to claims 4-5, Kobayashi's venting port (23) or fluid inlet port (21) has a seal (20a-20b, 22a-22b) that is selected from the poppet valves.

With regard to claim 6, Kobayashi's fluid reservoir is utilized in an ink jet print head (5, Figure 2).

With regard to claims 7, Kobayashi discloses additional limitation of a tube formed from the open end of the venting port (62) and having an opening (highest end) to the atmosphere at a level in a gravitational direction, at least equal to the level in the gravitational directions of the open end (highest end) of the fluid inlet port (64). Other limitations of claim 7 are discussed in rejection of claim 1.

Regarding claim 9, claim 9 essentially has the same limitations as claim 4. Therefore, claim 9 is rejected for the reasons provided in rejection of claim 4.

Regarding claim 10, claim 10 essentially has the same limitations as claim 5. Therefore, claim 10 is rejected for the reasons provided in rejection of claim 5.

Regarding claim 11, claim 11 essentially has the same limitations as claim 6. Therefore, claim 11 is rejected for the reasons provided in rejection of claim 6.

Regarding claim 12, claim 12 essentially has the same limitations as claim 2. Therefore, claim 12 is rejected for the reasons provided in rejection of claim 2.

Regarding claim 15, claim 15 essentially has the same limitations as claim 1. Therefore, claim 15 is rejected for the reasons provided in rejection of claim 15.

Regarding claim 16, claim 16 essentially has the same limitations as claim 2. Therefore, claim 16 is rejected for the reasons provided in rejection of claim 2.

Regarding claim 18, claim 18 essentially has the same limitations as claim 4. Therefore, claim 18 is rejected for the reasons provided in rejection of claim 4.

Regarding claim 19, claim 19 essentially has the same limitations as claim 5. Therefore, claim 10 is rejected for the reasons provided in rejection of claim 5.

Regarding claim 20, claim 20 essentially has the same limitations as claim 6. Therefore, claim 20 is rejected for the reasons provided in rejection of claim 20.

Claims 1-20 are further rejected under 35 USC 102 (b) as being anticipated by Ikkatai et al (US 6,022,102).

With regard to claim 1 discloses, in Figures 1, 2A, 4-5, 6A-6C, 9 and 14, a refillable fluid reservoir (65) for an ink jet print head comprising:

- a fluid reservoir (63 in Figure 9) having top (an unmarked top wall that contains an element 67), bottom (an unmarked bottom wall that is opposite with the top wall) and side walls (an unmarked side wall that contains an element 68) defining an interior volume (63a) for housing fluid (Figure 9);
- a venting port (67 in Figure 9) provided on one (the unmarked top wall that contains an element 67) of the reservoir walls and having an open end (unmarked open end located on the top wall); and
- a fluid inlet port (67 in Figure 9) provided on one (top wall) of the reservoir walls and having an open end (unmarked open end located on the top wall and the open end of the venting port 67) and the open end of fluid inlet port (67) (in Figure 9) are located at substantially the same vertical level, in gravitational direction (a direction from top wall to bottom wall of element 63) (Figure 9).

With regard to claims 2 , Ikkatai's the venting port (left side 67, Figure 9) and the fluid inlet port (right side 67, Figure 9) are located in the top wall of the fluid reservoir.

With regard to claim 3, Ikkatai's the venting port (17a) and the fluid inlet port (17b) are located at the sidewall of the reservoir (1), see Figures 2A-2B.

With regard to claims 4-5, Ikkatai's at least one of the venting port (67, Figure 9) and the fluid inlet port (67) having a seal (84 in Figure 10A) that is selected from the needle septum.

With regard to claim 6, Kobayashi's fluid reservoir (3) is utilized in an ink jet print head (2, Figure 2A).

With regard to claims 7, Ikkatai et al. discloses additional limitation of a tube formed from the open end of the venting port (151) and having an opening (highest end) to the atmosphere at a level in a gravitational direction, at least equal to the level in the gravitational directions of the open end (highest end) of the fluid inlet port (152) (Figure 14). Other limitations of claim 7 are discussed in rejection of claim 1.

With regard to claim 8, Ikkatai's the venting port (17a) and the fluid inlet (17b) are located in the side wall of the fluid reservoir (1) (Figure 2A).

Regarding claim 9, claim 9 essentially has the same limitations as claim 4. Therefore, claim 9 is rejected for the reasons provided in rejection of claim 4.

Regarding claim 10, claim 10 essentially has the same limitations as claim 5. Therefore, claim 10 is rejected for the reasons provided in rejection of claim 5.

Regarding claim 11, claim 11 essentially has the same limitations as claim 6. Therefore, claim 11 is rejected for the reasons provided in rejection of claim 6.

Regarding claim 12, claim 12 essentially has the same limitations as claim 2. Therefore, claim 12 is rejected for the reasons provided in rejection of claim 2.

With regard to claim 13, Ikkatai's the venting port (17a) and the fluid inlet port (17b) are having substantially horizontal inlet axes (18a, 18b) (Figure 2A).

With regard to claim 14, Ikkatai's the venting port (17a) and the fluid inlet port (17b) are having inlet axes (18a, 18b) aligned at an angle with respect to a vertical axes (Figure 2A).

Regarding claim 15, claim 15 essentially has the same limitations as claim 1. Therefore, claim 15 is rejected for the reasons provided in rejection of claim 15.

Regarding claim 16, claim 16 essentially has the same limitations as claim 2. Therefore, claim 16 is rejected for the reasons provided in rejection of claim 2.

Regarding claim 17, claim 17 essentially has the same limitations as claim 3. Therefore, claim 17 is rejected for the reasons provided in rejection of claim 3.

Regarding claim 18, claim 18 essentially has the same limitations as claim 4. Therefore, claim 18 is rejected for the reasons provided in rejection of claim 4.

Regarding claim 19, claim 19 essentially has the same limitations as claim 5. Therefore, claim 10 is rejected for the reasons provided in rejection of claim 5.

Regarding claim 20, claim 20 essentially has the same limitations as claim 6. Therefore, claim 20 is rejected for the reasons provided in rejection of claim 20.

### ***Response to Applicant's Arguments***

The applicant argues on page 2 of the Pre-Appeal Brief filed on 6/05/2006 that Figure 3 of Kobayashi does not include the open end of either of the venting port (23) and the fluid port (21).

The argument is persuasive. However, Figure 4A and 7 of Kobayashi clearly shown the open ends of the ink port (21, 64) and the vent port (23, 62).

The applicant argues that the open end of the ink port (21) and the open end of the vent port (23) is not at "substantially" the same level. The argument is not persuasive because Figure 4A of Kobayashi clearly show that the open lowest ends of the ink port (21) and the vent port (23) are "almost" at the same level. Since the claimed open ends of the claimed ports are at "substantially" the same level, they are not be exactly at the same level. Thus, the claimed open end of the claimed ports are anticipated by the lowest open ends of the ports (21, 23) of Kobayashi as shown in Figures 2 and 4A.

The applicant argues at page 5 that Ikkatai fails to disclose that the open end of the venting port (46a) and the open end of the fluid inlet port are located at substantially the same level. The argument is not persuasive because Figure 5 of Ikkatai clearly shows that the open ends of the ports (46a, 46b) for coupling to the open ends of the ports (44a, 44b) are at the same vertical level (gravitation direction) and Figure 9 of Ikkatai et al also clearly show the open ends of the ports (67) are at the same horizontal level.

## ***CONCLUSION***

**THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2861

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262.

The examiner can normally be reached on Tuesday to Friday from 9:00 A.M. to 7:00 P.M.

The fax number of this Group 2861 is (571) 273-8300.



ANHT.N. VO  
PRIMARY EXAMINER  
August 8, 2006